



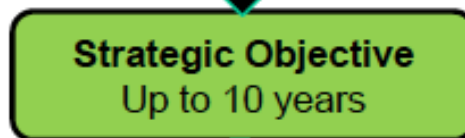
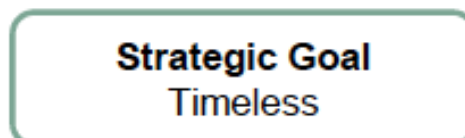
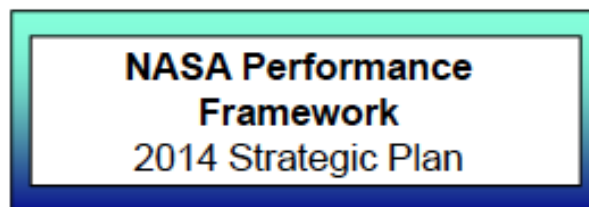
FY15 Heliophysics Science Performance Assessment (aka GPRAMA)

**Jeff Newmark
NASA HQ**

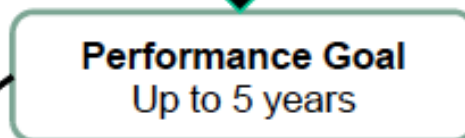
NASA's Strategy-Performance Framework



Strategic Objectives*: Starting with the 2014 strategic plans, every agency will be required to conduct strategic objectives annual reviews (SOAR). These reviews will highlight those areas where the agency has made “noteworthy progress” or faces “focus area(s) for improvement”. These annual reviews will provide input into budget formulation and require COO/PIO to make final categorizations. (Note: SOAR reviews also allow us to conduct a “pulse check” of PG/API progress in Q2.)

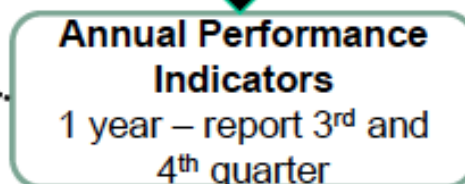
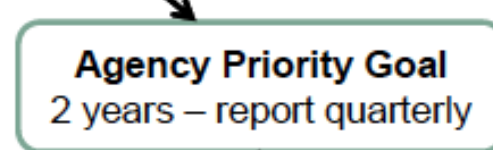
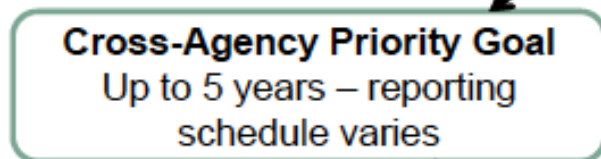


Below the dotted line are reviewed at the BPR



CAP Goals*: Presidential priority areas that require active collaboration between multiple departments and agencies because they address long-standing challenges for which no one agency has sole responsibility.

Agency Priority Goals*: Target areas where agency leaders want to achieve near-term performance acceleration through focused senior leadership attention



*Requirements mandated by the GPRA Modernization Act of 2010 and OMB Circular A-11

Introduction and Requirements



- SOARs: Strategic Objective Annual Reviews
 - An annual assessment of each Strategic Objective, analyzing progress toward our strategic direction
 - Required by Congress (GPRAMA) and implemented by OMB (A-11) for all major Federal agencies
 - We look at four methodological elements: long-term **impact**, **implementation**, strategic **risks & challenges**, and **opportunities**
- OMB expecting to use this information to understand our plans, how we justify our budget, and where they can take action
- SOAR findings will be an input to OMB's new initiative, called FedStat
- Compulsory categorization of all 15 NASA Objectives and OMB's quota:

– Categories:

**Noteworthy
Progress**

**Satisfactory
Performance**

**Focus Area for
Improvement**

NASA's 2014 Strategic Goals and Strategic Objectives



STRATEGIC GOAL 1	STRATEGIC GOAL 2	STRATEGIC GOAL 3
		
Expand the frontiers of knowledge, capability, and opportunity in space	Advance understanding of Earth and develop technologies to improve the quality of life on our home planet	Serve the American public and accomplish our Mission by effectively managing our people, technical capabilities, and infrastructure

By empowering the NASA community to...

Objective 1.1: Expand human presence into the solar system and to the surface of Mars to advance exploration, science, innovation, benefits to humanity, and international collaboration.

Objective 1.2: Conduct research on the International Space Station (ISS) to enable future space exploration, facilitate a commercial space economy, and advance the fundamental biological and physical sciences for the benefit of humanity.

Objective 1.3: Facilitate and utilize U.S. commercial capabilities to deliver cargo and crew to space.

Objective 1.4: Understand the Sun and its interactions with Earth and the solar system, including space weather.

Objective 1.5: Ascertain the content, origin, and evolution of the solar system and the potential for life elsewhere.

Objective 1.6: Discover how the universe works, explore how it began and evolved, and search for life on planets around other stars.

Objective 1.7: Transform NASA missions and advance the Nation's capabilities by maturing crosscutting and innovative space technologies.

By engaging our workforce and partners to...

Objective 2.1: Enable a revolutionary transformation for safe and sustainable U.S. and global aviation by advancing aeronautics research.

Objective 2.2: Advance knowledge of Earth as a system to meet the challenges of environmental change, and to improve life on our planet.

Objective 2.3: Optimize Agency technology investments, foster open innovation, and facilitate technology infusion, ensuring the greatest national benefit.

Objective 2.4: Advance the Nation's STEM education and workforce pipeline by working collaboratively with other agencies to engage students, teachers, and faculty in NASA's missions and unique assets.

By working together to...

Objective 3.1: Attract and advance a highly skilled, competent, and diverse workforce, cultivate an innovative work environment, and provide the facilities, tools, and services needed to conduct NASA's missions.

Objective 3.2: Ensure the availability and continued advancement of strategic, technical, and programmatic capabilities to sustain NASA's Mission.

Objective 3.3: Provide secure, effective, and affordable information technologies and services that enable NASA's Mission.

Objective 3.4: Ensure effective management of NASA programs and operations to complete the mission safely and successfully.

NASA's 2014 Strategic Plan is available [here](#).

Heliophysics FY15 Strategic Objectives

Strategic Goal 1:	Expand the frontiers of knowledge, capability, and opportunity in space
Objective 1.4	Understand the Sun and its interactions with Earth and the solar system, including space weather.
Performance Goal 1.4.1	Demonstrate progress in exploring the physical processes in the space environment from the Sun to Earth and throughout the solar system.
Performance Goal 1.4.2	Demonstrate progress in advancing understanding of the connections that link the Sun, Earth and planetary space environments, and the outer reaches of the solar system.
Performance Goal 1.4.3	Demonstrate progress in developing the knowledge and capability to detect and predict extreme conditions in space to protect life and society and to safeguard human and robotic explorers beyond Earth.
Performance Goal 1.4.4	By December 2017, launch two missions in support of Strategic Objective 1.4.

Heliophysics FY15 Annual Performance Indicator

Strategic Objective 1.4	Understand the sun and its interactions with earth and the solar system, including space weather.	
Multi-year Performance Goal 1.4.1	<i>Demonstrate progress in exploring the physical processes in the space environment from the Sun to Earth and throughout the solar system.</i>	TBD
API HE-15-1	Demonstrate planned progress in exploring the physical processes in the space environment from the Sun to Earth and throughout the solar system.	TBD
Multi-year Performance Goal 1.4.2	<i>Demonstrate progress in advancing understanding of the connections that link the Sun, Earth and planetary space environments, and the outer reaches of the solar system.</i>	TBD
API HE-15-2	Demonstrate planned progress in advancing understanding of the connections that link the Sun, Earth and planetary space environments, and the outer reaches of the solar system.	TBD

Heliophysics FY15 Annual Performance Indicator

Strategic Objective 1.4	Understand the sun and its interactions with earth and the solar system, including space weather.	
Multi-year Performance Goal 1.4.3	<i>Demonstrate progress in developing the knowledge and capability to detect and predict extreme conditions in space to protect life and society and to safeguard human and robotic explorers beyond Earth.</i>	TBD
API HE-15-3	Demonstrate planned progress in developing the knowledge and capability to detect and predict extreme conditions in space to protect life and society and to safeguard human and robotic explorers beyond Earth.	TBD

Heliophysics FY15 Annual Performance Indicator

†	Strategic Objective 1.4	Understand the sun and its interactions with earth and the solar system, including space weather.	
	<i>Multi-year Performance Goal 1.4.4</i>	<i>By December 2017, launch two missions in support of Strategic Objective 1.4.</i>	G
	API HE-15-4	Launch the Magnetospheric MultiScale (MMS) mission	G
	API HE-15-5	Initiate Solar Orbiter Collaboration launch integration activities at Kennedy Space Center.	G
	API HE-15-6	Complete Solar Probe Plus (SPP) Critical Design Review (CDR).	G

Performance and Accountability Report Process

- There are three Annual Performance Indicators in the NASA budget against which the subcommittee is asked to assess progress:
 - API HE-15-1 Demonstrate planned progress in exploring the physical processes in the space environment from the Sun to Earth and throughout the solar system,
 - API HE-15-2 Demonstrate planned progress in advancing understanding of the connections that link the Sun, Earth and planetary space environments, and the outer reaches of the solar system.
 - API HE-15-3 Demonstrate planned progress in developing the knowledge and capability to detect and predict extreme conditions in space to protect life and society and to safeguard human and robotic explorers beyond Earth.

Know your jargon lesson: HPS assesses progress on three APIs cited within the NASA budget.

Performance and Accountability Report Process

- The subcommittee is tasked with making a high-level, subjective assessment of science performance and should base their evaluations on their general sense of progress as evidenced by key accomplishments or disappointments for each of the three objectives.
- The subcommittee is asked to document their high-level assessment by assigning a color-code “grade” for each objective and providing short explanatory text that includes an overview and example achievements (shortfalls) upon which they based their assessment.
- SMD starts this process by providing draft science accomplishments for each science objective. The Subcommittee then reviews these inputs and edits, adds, and/or delete items to form their report.

Know your jargon: The PAR is submitted in partial fulfillment of our annual GPRAMA requirements.

GPRAMA Rating Definitions

Code	SMD Guidelines for PAR Science Ratings
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GREEN	Expectations for the research program fully met in context of resources invested.
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YELLOW	Some notable or significant shortfalls, but some worthy scientific advancements achieved.
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RED	Major disappointments or shortfalls in scientific outcomes, uncompensated by other unusually positive results.
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